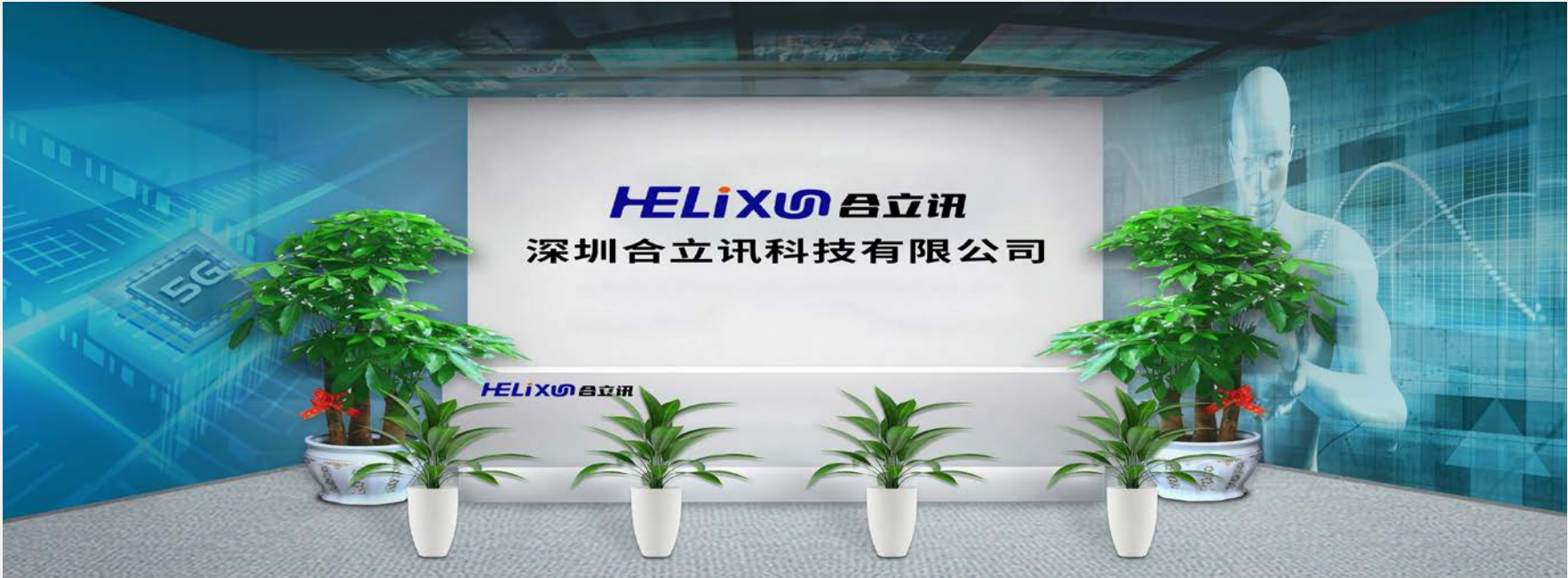




supplier	ShenzhenHelixunTechnology Co. , LTD
Customer	长音电子
Project	HLX0028-BT
Antenna Revision	A0
Prepared by	
Checked by	17279710721
Date:	2022.06.20

Purpose

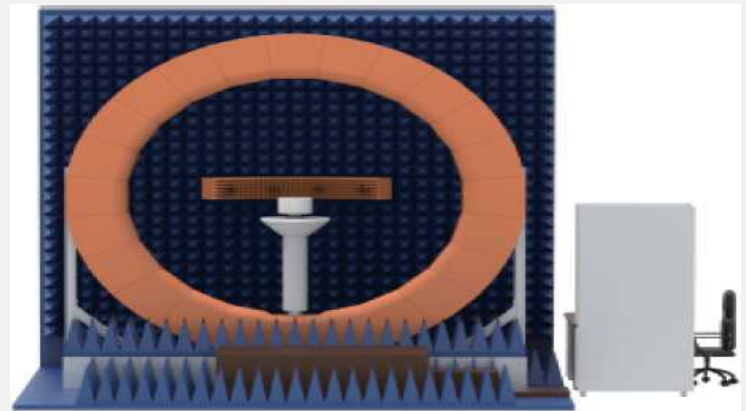
This report is to measure the performance of antenna for **HLX0028-BT** The antenna operating frequency at 2400-2500MHz, All test data are showed as below.

Content

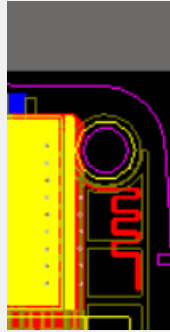
1. est system
- 2.Product Overview Dimension
3. Test Result
 - 3.1 S11 Parameter
 - 3.2 Gain & Efficiency
 - 3.3 2D Pattern

1.TestSystem

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5071B
OTA Test	TRP&TIS	Agilent 8960 & CMW500 STIMO
Gain & Efficiency	Gain & Efficiency	SATIMO Agilent 5071C

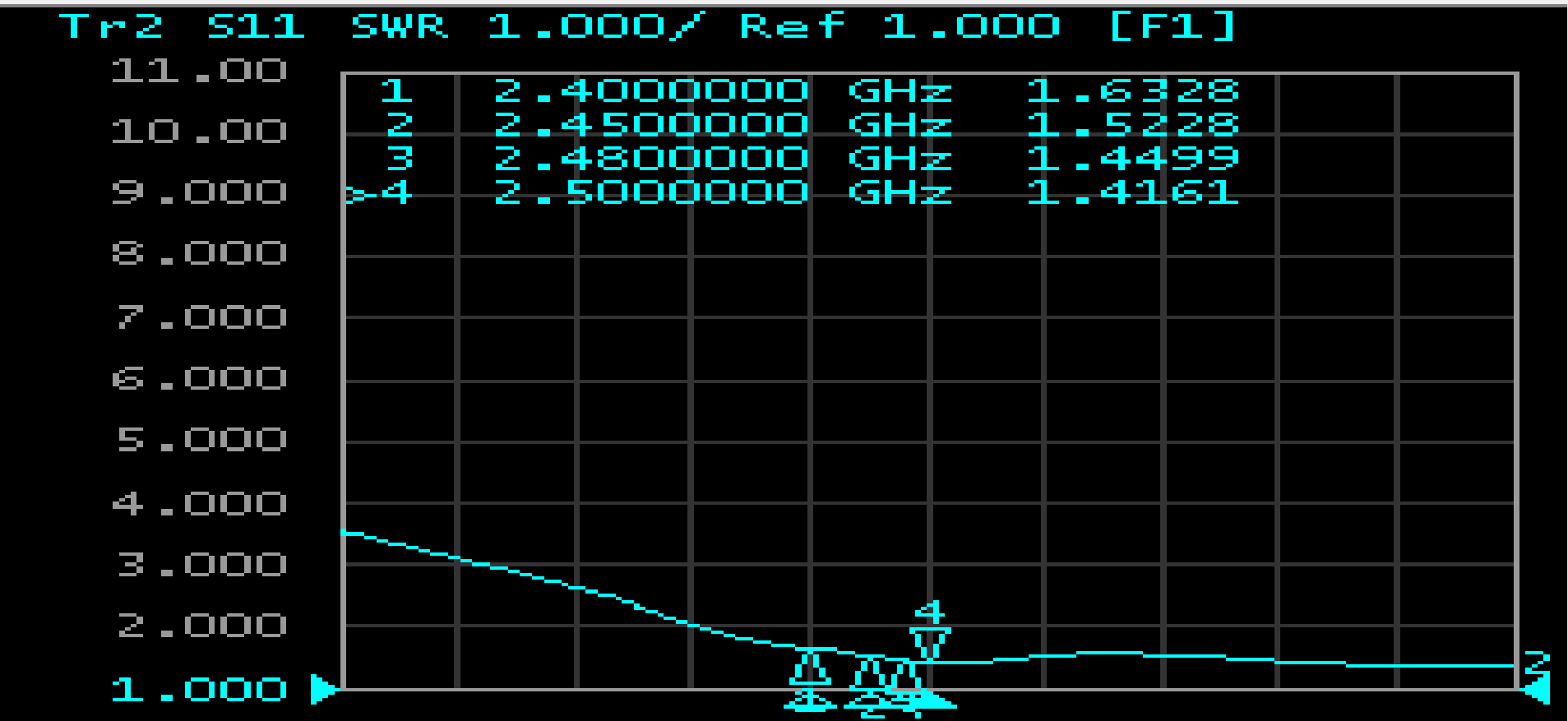


2.Product Overview & Dimension



3.Test Result

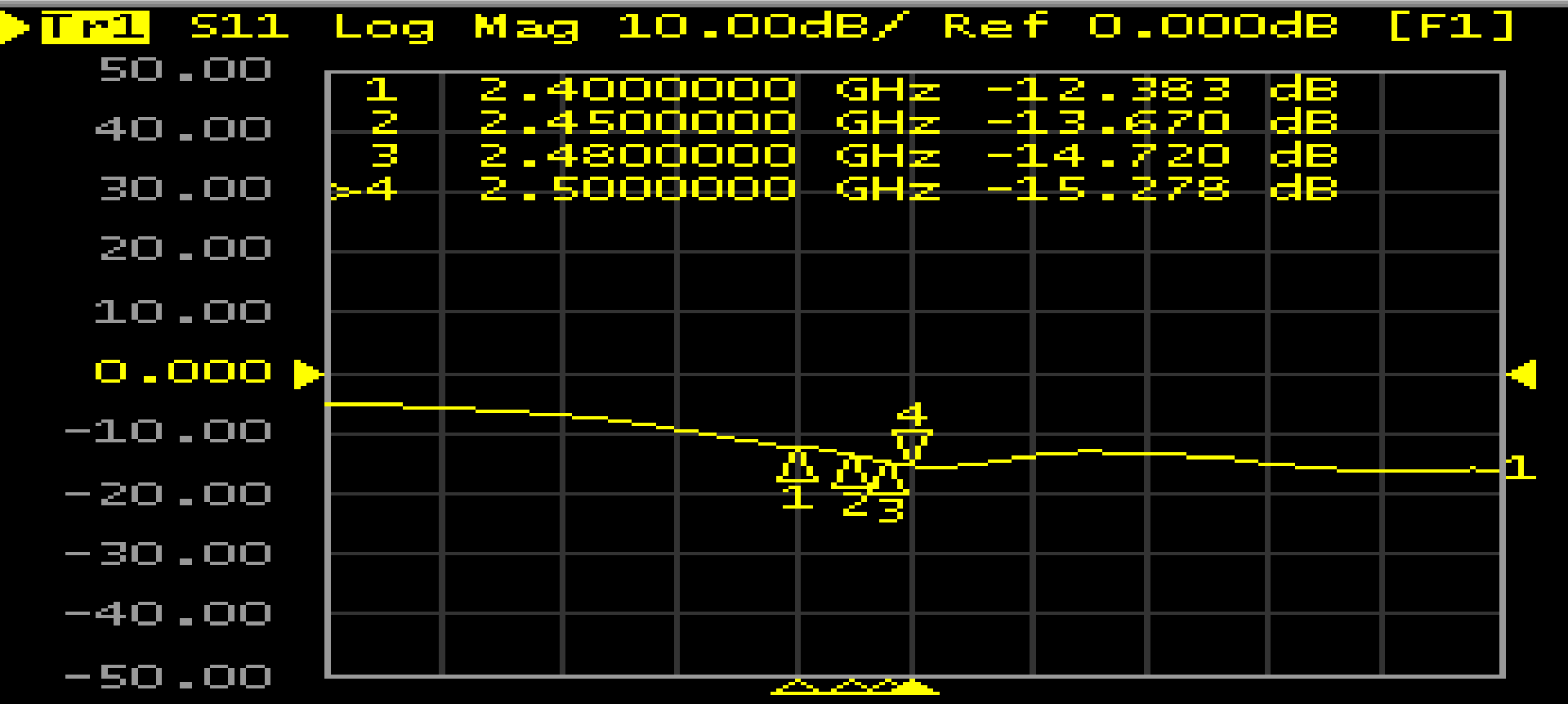
3.1 S11 Parameter-VSWR



requeency (MHz)	2400	2450	2480	2500
VSWR	1.63	1.52	1.44	1.41

3. Test Result

3.1 S11 Parameter-Log Mag



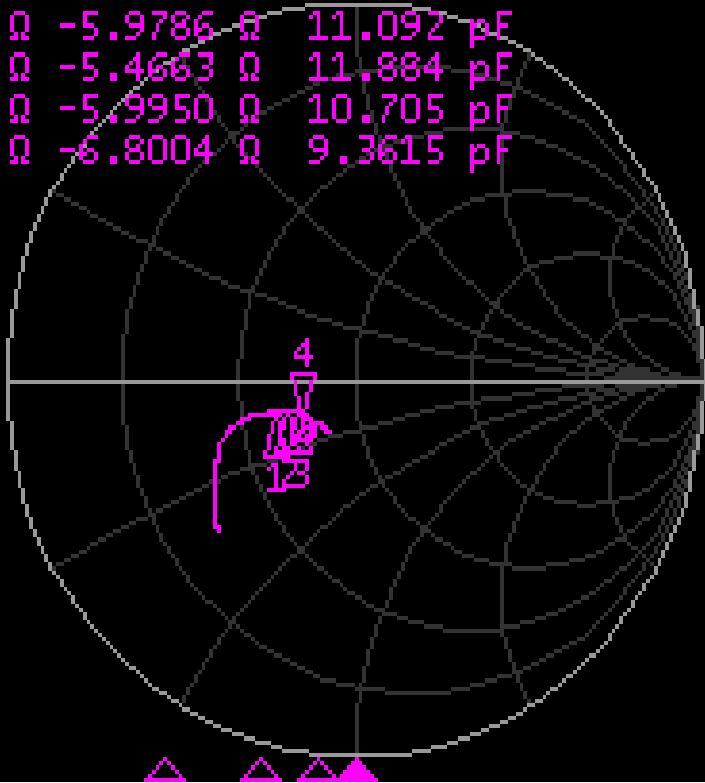
Frequency (MHz)	2400	2450	2480	2500
Log Mag	-12.38	-13.67	-14.72	-15.27

3.Test Result

3.1 S11 Parameter-Smith

Tr3 S11 Smith (R+jX) Scale 1.000U [F1]

1	2.4000000	GHz	31.332 Ω	-5.9786 Ω	11.092 pF
2	2.4500000	GHz	33.535 Ω	-5.4663 Ω	11.884 pF
3	2.4800000	GHz	35.454 Ω	-5.9950 Ω	10.705 pF
>4	2.5000000	GHz	36.661 Ω	-6.8004 Ω	9.3615 pF



Frequency (MHz)	2400	2450	2480	2500
Smith(Ω)	31.33	33.53	35.45	36.66

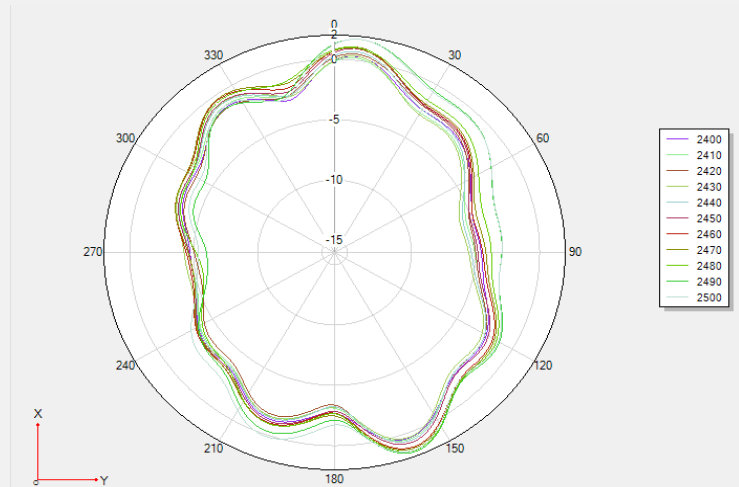
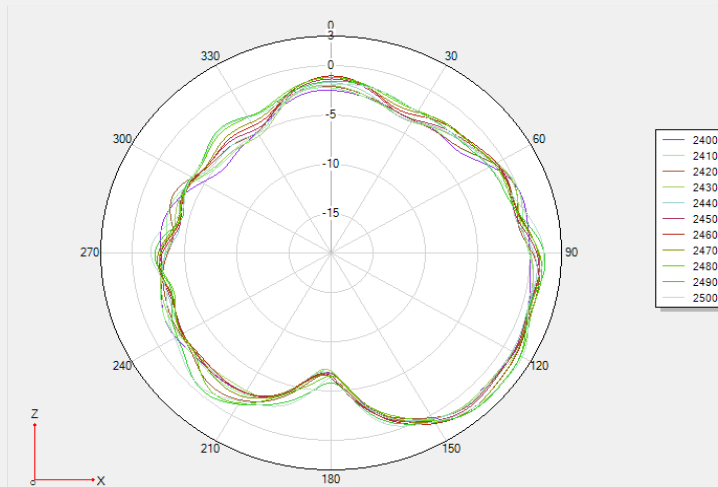
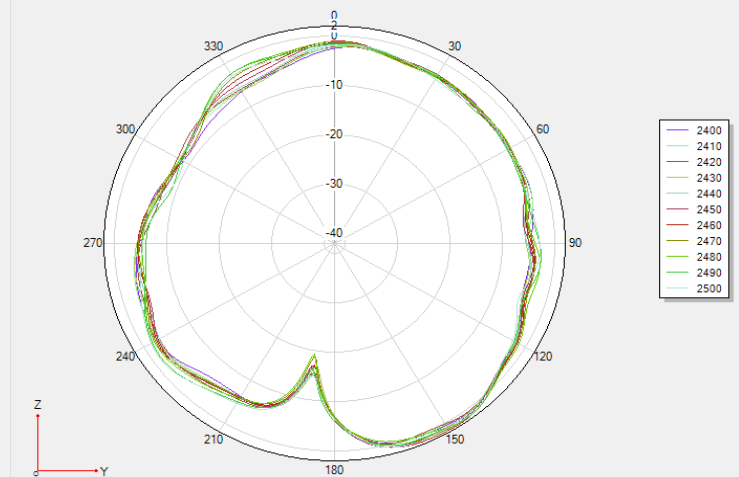
3. Test Result

3.2 Gain & Efficiency——**ANT**

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	55.85	2.75
2410	57.02	2.79
2420	56.89	2.94
2430	56.49	2.79
2440	57.15	2.96
2450	59.29	3.24
2460	61.52	3.57
2470	59.98	3.55
2480	60.67	3.73
2490	60.26	3.62
2500	59.98	3.35

3. Test Result

3.3 2D Pattern — BT ANT



Thank you!